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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,214	04/25/2001	Dmitri V. Vezenov	03-2459/1496.00379	5385
24319	7590	09/20/2004	EXAMINER	
LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 LEGAL MILPITAS, CA 95035			AHMED, SHAMIM	
			ART UNIT	PAPER NUMBER
			1765	

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/842,214	<b>Applicant(s)</b> VEZENOV ET AL.	
	<b>Examiner</b> Shamim Ahmed	<b>Art Unit</b> 1765	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 8, 13-18 and 21-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-12, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/26/02</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-7,9-12 and 12-20 in the reply filed on 8/16/04 is acknowledged. The traversal is on the ground(s) that the three groups of inventions are closely related and a search of any of the group would have been sufficient for the other groups. This is not found persuasive because the grouping of the inventions are distinct for the reasons given in the previous office action and have acquired a separate status in the art as shown by their different classification.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,3-4,6-7,9 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoyama et al (5,694,246).

Aoyama et al disclose a process of making optical device including the steps of forming a substrate having a corrugated upper surface by applying a photolithography and then depositing an optically active material layer over the substrate and thereby forming a series of microlenses having substantially hemi-cylindrical shape (col.3, lines 11-col.4, lines 47).

As to claims 7 and 19, Aoyama et al disclose that a mass production of the optical device is performed by molding, where in, a stamper and a lens array is formed using the stamper including the steps of:

forming a metal layer of nickel on the lens array serving as a master plate and the master plate is then removed to obtain a nickel stamper has concaves corresponding the lens array (col.4, lines 48-60);

molding a transparent substrate with the stamper in order to form concave grooves and filling with a dielectric material of UV-setting resin to form the same configuration as the convex lens array on the substrate (col.4, lines 61-col.5, lines 3).

4. Claims 1,2,5,9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Guerra (5,910,940).

Guerra disclose a process of making an optical data storage medium, wherein masters of the micro-optic arrays can be formed by photolithographic process to form a corrugated surface having grooves in the substrate (203) and than depositing a layer of an optically active material layer in order to form any array of optical structure (213) (col.16, lines 64-col.17, lines 15 and figures 18-19).

As to claim 10, Guerra teaches that following the formation of the optical structure 213, there can be added an active layer of phase change layer (217) (col.17, lines 21-23).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guerra (5,910,940) in view of Saito et al (6,090,907).

Guerra discloses in the paragraph 4 above and also teaches a protective layer (219) as resemble to the cover sheet (col.17, lines 21-24).

Guerra fails to teach that the protective layer is transparent layer comprises polycarbonate.

However, Saito et al teach that transparent polycarbonate is used during the manufacturing of optical devices including data recording medium because of the superior quality of transparency, mechanical strength of the polycarbonate material (col.7, line s15-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of claimed invention to employ Saito et al's teaching into Guerra's process for the benefit of superior transparency and stronger protection as taught by Saito et al.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al (5,694,246) in view of Aoyama et al (6,147,732).

Aoyama et al discussed above in the paragraph 3 but fail to teach that the transparent substrate is the plastic blank comprises polycarbonate.

However, Aoyama et al (6,147,732) teach that a transparent resin such as polycarbonate can be used as a molding layer during the manufacturing of optical devices (col.7, lines 29-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of claimed invention to employ Aoyama et al (6,147,732)'s teaching into Aoyama et al's process for efficiently forming optical devices as taught by Aoyama et al (6,147,732).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (571) 272-1457. The examiner can normally be reached on M-Thu (7:00-5:30) Every Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shamim Ahmed  
Examiner  
Art Unit 1765

SA  
September 18, 2004